



City of Santa Barbara

Parks and Recreation Department

www.sbparksandrecreation.com

www.SantaBarbaraCA.gov

Administration

Tel: 805.564.5431

Fax: 805.564.5480

Parks Division Office

Tel: 805.564.5433

Fax: 805.897.2524

Recreation Division

Office

Tel: 805.564.5418

Fax: 805.564.5480

Creeks Division Office

Tel: 805.897.2658

Fax: 805.897.2626

620 Laguna St.

PO Box 1990

Santa Barbara, CA

93102-1990

Golf Course

Tel: 805.564.5547

Fax: 805.897.2644

3500 McCaw Ave.

PO Box 1990

Santa Barbara, CA

93102-1990

Community Services

Tel: 805.963.7567

Fax: 805.963.7569

423 W. Victoria St.

PO Box 1990

Santa Barbara, CA

93102-1990

May 20, 2009

Ms. Mary Adams

Central Coast Regional Water Quality Control Board

895 Aerovista Place, Suite 101

San Luis Obispo, CA 93401

SUBJECT: Integrated Report

Dear Ms. Adams:

The City of Santa Barbara (City) appreciates this opportunity to provide comments on the Public Review Draft of the Clean Water Act Sections 305(b) and 303(d) Integrated Report for the Central Coast Region 2009 (Integrated Report). The City commends the Central Coast Regional Water Quality Control Board (Board) for the thorough, rational, and exhaustive analysis summarized in the report, reflecting an enormous amount of sampling and analytical work done by a limited number of staff. The report and online fact sheets are clear and helpful for understanding the Board's approach to the 2008 303(d) List of Impaired Waterbodies. In addition, Board staff have been very helpful and prompt when responding to questions and discussing sampling strategies and equipment.

The City would also like to thank the Board for responding to the City's informal comments regarding the listing of impairments for pathogens vs. specific fecal indicators, which is reflected in the listings for Arroyo Burro and Mission Creek, among others. In addition, the City applauds the Board's efforts to derive numerical criteria in support of the narrative biostimulatory substances objective in the Central Coast Basin Plan (1994).

The City respectfully requests that the Board address the following specific comments about the Integrated Report and Proposed 2008 303(d) Listings:

1. Water Quality Priorities

The City supports the Board's Vision of Healthy Watersheds and the use of the Vision to structure work towards the "highest water quality priorities," as described in the Brief Issue Descriptions for the 2009 Triennial Review. In reviewing the Integrated Report, the City finds that the approach for the 2008 Proposed Listings does not sufficiently prioritize listings, resulting in potential lost opportunities for improving the most serious impairments.

The automated scanning and listing approach used in the 2008 Listings is certainly ambitious and efficient, resulting in 500 proposed new listings, an unprecedented increase for the Central Coast. However, the new listings have not been "ground-truthed," i.e. checked against ongoing research, water quality projects, Storm Water Management Programs, and anecdotal evidence on the water bodies. In

addition, the 642 new and existing listings have not been ranked or categorized, other than to describe all ongoing TMDLs as high priority, two listings as medium priority, and the remaining 605 listings as low priority with the EPA-mandated generic TMDL deadline of 2021.

Municipalities, researchers, granting agencies, NGOs, and students often base allocation of limited water quality resources on the 303(d) list. The downside of “over listing” is that without careful review and prioritization, opportunities are lost for focusing on the most serious threats. As a specific example, the City of Santa Barbara has spent time and resources in the past two years on addressing the Unknown Toxicity Listing for Mission Creek. Based on current evidence, the City believes this listing is not warranted (see #3 below).

The effort required to de-list and/or change a beneficial use designation is stringent, time consuming, and costly. The City requests that the Board review the computer-generated proposed listings and create a rubric for identifying the most supported and serious threats, along with those in line with the Triennial Review and Vision, and clarify prioritization and rationale in the Final Integrated Report.

2. Integration of Board Processes

The Board has a tremendous opportunity in 2009 to align the biannual 303(d) Listings and the Triennial Basin Plan Review with the newly established Vision and effort at prioritization of water quality issues. Going a step further, the Listings and Triennial Review should also be integrated with anticipated needs for the upcoming TMDLs, particularly the large-scale Santa Barbara Beaches Bacteria TMDL, such as beneficial use re-assessment. If the Board remains on schedule, the next opportunity for temporal alignment will come in 2015, when the Bacteria TMDL will be near completion. The City suggests that the Board take this opportunity to focus on dovetailing the processes by reviewing bacteria objectives and bacteria TMDL approaches in conjunction with reviewing the bacteria listings. As detailed in the attached comment letter on the Triennial Review process (Attachment 1), the City requests that the Board consider a Basin Plan Amendment that outlines TMDL approaches, bacteria objectives, and beneficial uses. The City suggests that the proposed 2008 bacteria listings region-wide be reassessed using objectives that the Board proposes in the Triennial Review.

3. Mission Creek Unknown Toxicity.

The City requests that Mission Creek’s listing for Unknown Toxicity be reassessed pursuant to the following delisting factors (Water Quality Control Policy for Developing California’s Clean Water Act Section 303(d) List; SWRCB, 2004):

- a. Adverse Biological Response. The standard for de-listing is reproduced here:

Water segments or pollutants shall be removed from the section 303(d) list if any of the following conditions are met.

4.8 Adverse Biological Response. Adverse biological response is no longer evident or associated water or sediment numeric pollutant-specific evaluation guidelines are not exceeded using the binomial distribution as described in section 4.1.

The City understands that the listing was made in 1998, based on a conversation with a Department of Fish and Game staff about a fish kill in Mission Creek in the

early the early 1990s. It is unclear who made the observation or whether a single or multiple specimens were observed (see attached email exchange with Christopher Rose, Attachment 2). Since then, no fish kills have been reported in the creek, and the adverse biological response is no longer evident. With the formation of the City's Creeks Division in 2001, City staff, consultants, and community members have closely observed and monitored Mission Creek, and a fish kill would have been noticed and reported. In addition, tidewater gobies have been observed in the lagoon and creek, and steelhead trout have migrated to and attempted to spawn in the creek in five of the past six years.

In addition, the City understands there was concern regarding arsenic levels in Mission Creek (see Attachment 2). In the 2008 fact sheet for Mission Creek, the Board shows that the single sediment sample collected was not elevated for arsenic. In addition, the City is providing the Board with water quality data (Attachment 3) on dissolved and total arsenic. Of 81 samples collected, 71 were reported "below detection," and the remaining ten were below the USEPA standards for chronic exposure to dissolved and total arsenic.

- b. Water/Sediment Toxicity. The standard for de-listing is reproduced here:

Water segments or pollutants shall be removed from the section 303(d) list if any of the following conditions are met.

4.6 Water/Sediment Toxicity Water/Sediment Toxicity or associated water or sediment quality guidelines are not exceeded using the binomial distribution as described in section 4.1.

Mission Creek was assessed under Section 4.1 for Numeric Water Quality Objectives, Criteria, or Standards for Toxicants in Water, which requires a minimum sample size of 28 and less than 2 exceedances to de-list a water body. The Board used data from four samples in the decision to not delist. The City has also tested toxicity in Mission Creek water on seven occasions, including storm conditions, and has found no evidence of a toxic response (see Attachment 4). With six additional samples tested recently by CCAMP, but not included in the 2008 decision, there are approximately 17 samples that have been tested for toxicity and that have not shown a response. While the total does not meet the data set size requirement in Table 4.1, when taken in conjunction the lack of exceedances, the original anecdotal listing, and the lack of ongoing adverse biological response, it supports a de-listing for Unknown Toxicity in Mission Creek. Furthermore, the City plans to present additional data at the Board hearing in July, 2009.

In the absence of reported fish kills, observations of sensitive fish species, and a complete lack of water quality exceedances for toxicity and arsenic (total and dissolved), the City requests that that Mission Creek be delisted for unknown toxicity.

4. Arroyo Burro *E. coli*.

The City requests that the listing be reassessed because of concerns with the objective used to determine exceedances for *E. coli* in freshwater. The USEPA criteria for *E. coli* in designated

freshwater bathing beaches (235 MPN/100 ml) was used for all creek reaches. The City feels it would be more appropriate to use the criteria for “infrequent use coastal recreation areas,” also defined as areas with “infrequently used full body contact recreation” (575 MPN/100 ml) for this creek, as all of the reaches are used infrequently for bathing (see pages from the bacteria Final Rule, Attachment 5). The State Water Board recently approved an amendment to the San Diego Basin Plan that uses the USEPA criteria for *E. coli* that vary depending on degree of beach use (see Amendment, Attachment 6). Using the more appropriate criteria, Arroyo Burro would not meet the exceedances required to list. Using the more appropriate criteria, Mission Creek would have many fewer exceedances than are listed in the fact sheet, but would still continue to meet the requirements for listing.

5. Arroyo Burro fecal coliform (decision to not delist), Sycamore Creek for fecal coliform, and Mission Creek for fecal coliform.

The City requests that these three decisions be reassessed for the following reasons:

- a. The listings are redundant in purpose and likely implementation BMPs with those for *E. coli* and will lead to allocation of resources that is not in line with water quality priorities or current science. Currently, almost every monitoring group in the area tests for *E. coli* and uses the results interchangeably or with a conversion factor for fecal coliform. The difference in the two measures in their potential sources and impacts is not sufficient to justify both listings.
- b. The Board uses the fecal coliform standard of “not exceeding 400/100 ml in more than 10% of the samples in a 30-day period” in effect as a single sample maximum, and typically samples once per month. The City is not clear that this approach reflects the original intention of the objective or if it meets the statistical assumptions of the objective. The City has concerns about the objective because the USEPA criteria for the geomean are explicitly based on collection of no less than 5 samples in a thirty day period. The City requests that the Board demonstrate that the original objective for protecting human health was intended to act as a single sample maximum, or that it allows a single sample collected per month.
- c. Epidemiology studies do not support the use of fecal coliform (for example, see Attachment 7).
- d. Specifically for Sycamore Creek: The listing is based on monthly samples collected over 14 months. Basing a listing on a single year of data is questionable due to annual variations (see Attachment 8) and the data quantity may not meet the requirements put forth in Section 6.1.5.4 of the Water Quality Control Policy for temporal representation.

6. East Beach at Sycamore Creek for Enterococcus.

This listing is based on the line of evidence for exceedances of the geomean criterion. The line of evidence for exceedances of the single sample maximum criterion does not support listing. The City requests that the proposed listing be reassessed for the following reasons:

- a. The Board converted values of “<10/100 ml” (i.e., below detection) to 10/100 ml prior to calculating geomeans. This approach is incorrect, particularly when a large portion of the values are below the detection limit, and can lead to a

substantial overestimate of the number of exceedances (see Attachment 9). The most rigorous approach is to use Maximum Likelihood Estimation Methods (see summary in Attachment 9). Other approaches are arbitrary, but the City conducted a quick test replacing the values with “1,” which leads to a lack of support for the listing.

- b. The time period analyzed had some of the highest rainfalls and worst water quality grades across California (see Heal the Bay data, Attachment 10) and the data quantity may not meet the requirements put forth in Section 6.1.5.4 of the Water Quality Control Policy for temporal representation.
- c. If the proposed listing is finalized, it gives East Beach at Sycamore Creek the same priority for solving water quality issues as East Beach at Mission Creek and Arroyo Burro Beach on the TMDL list. Given the Heal the Bay report card comparisons (see Attachment 11), this is not in line with the Regional Board’s Vision of prioritizing the most serious water quality threats.

7. Leadbetter Beach for Total Coliform.

The City requests that this listing be reassessed because it is based on the SHELL beneficial use. Leadbetter beach is not designated specifically or implicitly for SHELL in the Table 2-1 of the Basin Plan (see Attachment 12). The lines of evidence for REC-1 and REC-2 beneficial use do not support listing.

8. Arroyo Burro Beach for Total Coliform (decision to not delist).

The City requests that the decision be reassessed based on the calculation of the geomean, as described in 6.a. above. Furthermore, there is growing evidence that Total Coliform does not correlate with the risk for human illness and that regrowth occurs frequently in the environment, such as on sediment, leaf litter, and decaying wrack (see Attachment 13).

9. Sycamore Creek for Sodium and Chloride.

The City requests that the Board reassess this listing for the following reasons:

- a. The listing is based on the beneficial use of agriculture. The City is not aware of any agriculture in Sycamore Creek watershed that draws (or has drawn in the past) water from the creek. Additional queries were made upon the release of the Integrated Report and no agricultural use has been identified.
- b. The source of sodium and chloride is likely erosion or dissolution of natural deposits, as values are high in the upper watershed (see Attachment 14). Salts and conductivity tend to be high in all South Coast Creeks and groundwater.
- c. The listing for sodium and chloride is not a high priority for the Board. Board staff suggested that the listing move forward, and the process for removing the beneficial use take place afterward. However, according to Board staff, the removal process is extensive:

“Revising or removing a beneficial use requires a public process leading to a Basin Plan amendment approved by the Regional Board, the State

Board, the Office of Administrative Law (OAL) and EPA (for surface waters only). Generally, we may not remove a beneficial use if it is an "existing use" (40 CFR 131.10). An existing use is a use that was actually attained in a waterbody on or after November 28, 1975, whether or not they are included in the water quality standards (40 CFR 131.3 (e)). The de-designation of the use must consider anti-degradation." (via email exchange with Ms. Adams).

The City does not wish to spend limited resources requesting a beneficial use removal, especially if the listing were not warranted or necessary to begin with.

The City appreciates the opportunity to comment on the Integrated Report and looks forward to the Board's responses. Please do not hesitate to contact me if you need any clarification or additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Cameron Benson', with a stylized, cursive script.

Cameron Benson
Creeks Restoration/Clean Water Manager
City of Santa Barbara
P.O Box 1990
Santa Barbara, CA 93102
CBenson@SantaBarbaraCA.gov
(805) 897-2658